Data Validation Checklist
Semivolatile Organic Analyses

Project:	35TH Avenue Superfund Site	Project No:	15268508.20000
Laboratory:	TestAmerica – Tampa, FL	Job ID.:	680-87318-2
Method:	SW-846 8270C Low-Level (PAH)	Associated Samples:	Refer to **Attachment A** (Sample Summary)
Matrix:	Soil	Date(s) Collected:	02/07/2013
Reviewer:	Jane Lindsey	Date:	02/27/2013
Concurrence[1]:	Carol Lovett, Martha Meyers-Lee	Date:	03/27/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			✓		
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 020513-RB-Bowls+Spoons (680-87170-29).	

[1] Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank (020513-RB-Bowls+Spoons) was collected during the week of 02/04/2013. The rinsate blank was analyzed for PAHs under Test America Job ID 680-87170-2.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			• CV0005O-CS and CV0005O-CSD (680-87318-21 and 680-87318-22) • CV0005R-CS and CV0005R-CSD (680-87318-25 and 680-87318-26) • CV0005T-CS and CV0005T-CSD (680-87318-28 and 680-87318-29) • CV0005U-CS and CV0005U-CSD (680-87318-30 and 680-87318-31) • CV0005X-CS and CV0005X-CSD (680-87318-34 and 680-87318-35) • CV0005Z-CS and CV0005Z-CSD (680-87318-37 and 680-87318-38) In addition, CV0005BB-CS (680-87318-40) has a field duplicate CV0005BB-CSD (680-87318-41) in Job ID 680-87318-3, and the evaluation of field precision is documented in the data validation checklist associated with that Job ID.	
15. Was precision deemed acceptable as defined by the project plans?		✓		See **Attachment B** (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument?	✓			• Initial Calibration: 01/30/2013, instrument BSMA5973	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
• Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. • An initial calibration is to be associated with each sample analysis. • A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument.				• ICV: 01/30/2013 @13:35 • CCV: 02/15/2013 @15:21 • Initial Calibration: 01/07/2013, instrument BSMC5973 • ICV: 01/07/2013 @17:31 • CCV: 02/15/2013 @11:56 • CCV: 02/18/2013 @14:07	
19. Were calibration results within laboratory/project specifications? • ICAL (Criteria: ≤15 mean %RSD with individual CCC %RSD ≤30 (≤50% for poor performers), OR r≥0.995, OR r^2≥0.99, and RRF ≥0.050 (≥0.010 for poor performers)): o If %RSD>15 (>50% for poor performers), or r <0.995, or r^2 <0.995, then J-flag positive results and UJ-flag non-detects o If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: ≤20%D (≤50% for poor performers) and RF ≥0.050 (≥0.010 for poor performers)): o If %D>20 (>50% for poor performers), then J-flag positive results and UJ-flag non-detects o If RF <0.050 (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds		✓		ICV of 01/30/13 @ 13:35, instrument BSMA5973: 2-Methylnaphthalene @23.7 %D (Lab: ≤35, Project: ≤20). Positive bias is indicated by the CCV percent difference; therefore, J flag the detected 2-methyl naphthalene result in associated samples[2].	J
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R >Upper Control Limit (UCL) and J/R-flag results when %R <Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects		✓		LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				

[2] 680-87318-25 through 31, and 34 through 40

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
24. Is the MS/MSD parent sample a project-specific sample?	✓			• Prep Batch 134472: 680-87279-A-21 (Batch sample), MS/MSD • Prep Batch 134486: 680-87318-36 (CV0005Y-CS), MS/MSD	
25. Were MS/MSD recoveries within laboratory/project specifications? *Only QC results for project samples that are reported under this Job ID are evaluated.* • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If either MS or MSD recovery meets control limits, qualification of data is not warranted. • MS and MSD %R<10: J and R Flag positive and ND results, respectively • MS and MSD %R >10 and <LCL: J-Flag positive and UJ-flag non-detect results • MS and MSD R% >UCL (or 140): J-Flag positive results		✓		CV0005Y-CS (680-87318-36): • Benzo(a)anthracene MSD @ 273%R (40-130). Qualification of data is not required, because the MS %R (78) was acceptable. • Benzo(a)pyrene MSD @ 151%R (49-130). Qualification of data is not required, because the MS %R (85) was acceptable. • Benzo(b)fluoranthene MSD @ 208%R (37-130). Qualification of data is not required, because the MS %R (58) was acceptable. • Benzo(k)fluoranthene MSD @ 132%R (32-130). Qualification of data is not required, because the MS %R (54) was acceptable. • Chrysene MSD @ 203%R (41-130). Qualification of data is not required, because the MS %R (63) was acceptable. • Fluoranthene MSD @ 447%R (40-130). Qualification of data is not required, because the MS %R (66) was acceptable. • Phenanthrene MSD @ 280%R (42-130). Qualification of data is not required, because the MS %R (69) was acceptable. • Pyrene MSD @ 270%R (44-130). Qualification of data is not required, because the MS %R (57) was acceptable.	
26. Were laboratory criteria met for precision during the MS/MSD analysis? *Only QC results for project samples that are reported under this Job ID are evaluated.* • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If %RPD > UCL, J-flag positive result and UJ-flag non-detect result		✓		CV0005Y-CS (680-87318-36): • Benzo(a)anthracene MS/MSD RPD @ 84% (≤40) • Benzo(a)pyrene MS/MSD RPD @ 71% (≤40) • Benzo(b)fluoranthene MS/MSD RPD @ 75% (≤40) • Benzo(g,h,i)perylene MS/MSD RPD @ 43% (≤40) • Benzo(k)fluoranthene MS/MSD RPD @ 67% (≤40) • Chrysene MS/MSD RPD @ 77% (≤40) • Fluoranthene MS/MSD RPD @ 117% (≤40) • Indeno(1,2,3-cd)pyrene MS/MSD RPD @ 41% (≤40)	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
				• Phenanthrene MS/MSD RPD @ 94% (≤40) • Pyrene MS/MSD RPD @ 100% (≤40) J Flag results for the above-mentioned compounds in sample CV0005Y-CS due to matrix interference.	
27. Were surrogate recoveries within lab/project specifications? • If %R <10, then J-flag positive and R-flag non-detect associated sample results • If %R >UCL, then J-flag positive results • %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results • If 1 %R >UCL and 1 %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results	✓			.	
28. Were internal standard (IS) results within lab/project specifications? • If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results • If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results • If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results • If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. • The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.	✓				
29. Were lab comments included in report?	✓			Refer to **Attachment C** (Case Narrative)	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
Comments: The data validation was conducted in accordance with the *Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1* (OTIE, October 2012). The data review process was modeled after the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review* (EPA, October 1999) and *USEPA CLP NFG for Low Concentration Organic Methods Data Review* (EPA, June 2001). Sample results have been qualified based on the results of the data review process (**Attachment D**). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

DV Flag Definitions:

J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
R	The sample results are unusable. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
UJ	The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A

SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-2
SDG: 68087318-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87318-21	CV0005O-CS	Solid	02/07/13 13:45	02/09/13 10:33
680-87318-22	CV0005O-CSD	Solid	02/07/13 13:47	02/09/13 10:33
680-87318-23	CV0005Q-CS	Solid	02/07/13 13:57	02/09/13 10:33
680-87318-24	CV0005P-CS	Solid	02/07/13 13:52	02/09/13 10:33
680-87318-25	CV0005R-CS	Solid	02/07/13 14:11	02/09/13 10:33
680-87318-26	CV0005R-CSD	Solid	02/07/13 14:13	02/09/13 10:33
680-87318-27	CV0005S-CS	Solid	02/07/13 14:10	02/09/13 10:33
680-87318-28	CV0005T-CS	Solid	02/07/13 14:23	02/09/13 10:33
680-87318-29	CV0005T-CSD	Solid	02/07/13 14:25	02/09/13 10:33
680-87318-30	CV0005U-CS	Solid	02/07/13 14:32	02/09/13 10:33
680-87318-31	CV0005U-CSD	Solid	02/07/13 14:34	02/09/13 10:33
680-87318-32	CV0005V-CS	Solid	02/07/13 14:34	02/09/13 10:33
680-87318-33	CV0005W-CS	Solid	02/07/13 14:41	02/09/13 10:33
680-87318-34	CV0005X-CS	Solid	02/07/13 15:00	02/09/13 10:33
680-87318-35	CV0005X-CSD	Solid	02/07/13 15:02	02/09/13 10:33
680-87318-36	CV0005Y-CS	Solid	02/07/13 15:00	02/09/13 10:33
680-87318-37	CV0005Z-CS	Solid	02/07/13 15:10	02/09/13 10:33
680-87318-38	CV0005Z-CSD	Solid	02/07/13 15:12	02/09/13 10:33
680-87318-39	CV0005AA-CS	Solid	02/07/13 15:35	02/09/13 10:33
680-87318-40	CV0005BB-CS	Solid	02/07/13 15:36	02/09/13 10:33

ATTACHMENT B

FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results **Attachment B**

Analyte	CV0005O-CS (680-87318-21)	RL	CV0005O-CSD (680-87318-22)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	17	42	6.7	44	µg/kg	215	NA	10.3	86	None, absolute difference ≤ 2x Avg RL
Anthracene	26	8.7	26	9.2	µg/kg	44.75	NA	0	17.9	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	180	8.3	85	8.8	µg/kg	42.75	**72**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(a)pyrene	180	11	75	11	µg/kg	55	**82**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(b)fluoranthene	310	13	120	13	µg/kg	65	**88**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(g,h,i)perylene	130	21	65	22	µg/kg	107.5	NA	**65**	**43**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(k)fluoranthene	97	8.3	38	8.8	µg/kg	42.75	NA	**59**	**17.1**	**J/UJ-flag, absolute difference > 2x Avg RL**
Chrysene	190	9.4	93	9.8	µg/kg	48	**69**	NA	NA	**J/UJ-flag, RPD > 50%**
Dibenzo(a,h)anthracene	39	21	13	22	µg/kg	107.5	NA	26	43	None, absolute difference ≤ 2x Avg RL
Fluoranthene	320	21	180	22	µg/kg	107.5	**56**	NA	NA	**J/UJ-flag, RPD > 50%**
Fluorene	8.0	21	8.4	22	µg/kg	107.5	NA	0.4	43	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	100	21	47	22	µg/kg	107.5	NA	**53**	**43**	**J/UJ-flag, absolute difference > 2x Avg RL**
1-Methylnaphthalene	39	42	100	44	µg/kg	215	NA	61	86	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	50	42	100	44	µg/kg	215	NA	50	86	None, absolute difference ≤ 2x Avg RL
Naphthalene	44	42	57	44	µg/kg	215	NA	13	86	None, absolute difference ≤ 2x Avg RL
Phenanthrene	130	8.3	120	8.8	µg/kg	42.75	8	NA	NA	None, RPD ≤ 50%
Pyrene	300	21	150	22	µg/kg	107.5	**67**	NA	NA	**J/UJ-flag, RPD > 50%**

Analyte	CV0005R-CS (680-87318-25)	RL	CV0005R-CSD (680-87318-26)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	62	220	84	210	µg/kg	1075	NA	22	430	None, absolute difference ≤ 2x Avg RL
Anthracene	98	45	110	44	µg/kg	222.5	NA	12	89	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	370	43	390	42	µg/kg	212.5	5	NA	NA	None, RPD ≤ 50%
Benzo(a)pyrene	270	56	250	55	µg/kg	277.5	NA	20	111	None, absolute difference ≤ 2x Avg RL
Benzo(b)fluoranthene	390	66	430	64	µg/kg	325	10	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	310	110	250	110	µg/kg	550	NA	60	220	None, absolute difference ≤ 2x Avg RL
Benzo(k)fluoranthene	200	43	140	42	µg/kg	212.5	NA	60	85	None, absolute difference ≤ 2x Avg RL
Chrysene	400	49	340	48	µg/kg	242.5	16	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	100	110	77	110	µg/kg	550	NA	23	220	None, absolute difference ≤ 2x Avg RL
Fluoranthene	520	110	590	110	µg/kg	550	NA	70	220	None, absolute difference ≤ 2x Avg RL
Fluorene	28	110	29	110	µg/kg	550	NA	1	220	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	250	110	230	110	µg/kg	550	NA	20	220	None, absolute difference ≤ 2x Avg RL
1-Methylnaphthalene	90	220	150	210	µg/kg	1075	NA	60	430	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	130	220	200	210	µg/kg	1075	NA	70	430	None, absolute difference ≤ 2x Avg RL
Naphthalene	130	220	130	210	µg/kg	1075	NA	0	430	None, absolute difference ≤ 2x Avg RL
Phenanthrene	320	43	390	42	µg/kg	212.5	20	NA	NA	None, RPD ≤ 50%
Pyrene	410	110	430	110	µg/kg	550	NA	20	220	None, absolute difference ≤ 2x Avg RL

Analyte	CV0005T-CS (680-87318-28)	RL	CV0005T-CSD (680-87318-29)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	270	210	250	210	µg/kg	1050	NA	20	420	None, absolute difference ≤ 2x Avg RL
Anthracene	320	45	280	45	µg/kg	225	13	NA	NA	None, RPD ≤ 50%
Benzo(a)anthracene	1000	43	1100	42	µg/kg	212.5	10	NA	NA	None, RPD ≤ 50%
Benzo(a)pyrene	770	55	660	55	µg/kg	275	15	NA	NA	None, RPD ≤ 50%
Benzo(b)fluoranthene	1000	65	880	65	µg/kg	325	13	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	640	110	530	110	µg/kg	550	NA	110	220	None, absolute difference ≤ 2x Avg RL
Benzo(k)fluoranthene	450	43	470	42	µg/kg	212.5	4	NA	NA	None, RPD ≤ 50%
Chrysene	890	48	850	48	µg/kg	240	5	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	220	110	190	110	µg/kg	550	NA	30	220	None, absolute difference ≤ 2x Avg RL
Fluoranthene	1300	110	1400	110	µg/kg	550	7	NA	NA	None, RPD ≤ 50%
Fluorene	50	110	72	110	µg/kg	550	NA	22	220	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	550	110	520	110	µg/kg	550	NA	30	220	None, absolute difference ≤ 2x Avg RL
1-Methylnaphthalene	140	210	170	210	µg/kg	1050	NA	30	420	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	160	210	220	210	µg/kg	1050	NA	60	420	None, absolute difference ≤ 2x Avg RL
Naphthalene	140	210	160	210	µg/kg	1050	NA	20	420	None, absolute difference ≤ 2x Avg RL
Phenanthrene	730	43.0	790	42	µg/kg	212.5	8	NA	NA	None, RPD ≤ 50%
Pyrene	1100	110	1200	110	µg/kg	550	9	NA	NA	None, RPD ≤ 50%

Evaluation of Field Duplicate Results **Attachment B**

Analyte	CV0005U-CS (680-87318-30)	RL	CV0005U-CSD (680-87318-31)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	360	210	190	210	µg/kg	1050	NA	170	420	None, absolute difference ≤ 2x Avg RL
Anthracene	440	45	360	44	µg/kg	222.5	20	NA	NA	None, RPD ≤ 50%
Benzo(a)anthracene	840	42	1100	42	µg/kg	210	**27**	NA	NA	None, RPD ≤ 50%
Benzo(a)pyrene	780	55	710	55	µg/kg	275	9	NA	NA	None, RPD ≤ 50%
Benzo(b)fluoranthene	1000	65	1100	64	µg/kg	322.5	10	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	680	110	530	100	µg/kg	525	25	NA	NA	None, RPD ≤ 50%
Benzo(k)fluoranthene	420	42	380	42	µg/kg	210	10	NA	NA	None, RPD ≤ 50%
Chrysene	750	48	830	47	µg/kg	237.5	10	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	220	110	190	100	µg/kg	525	NA	30	210	None, absolute difference ≤ 2x Avg RL
Fluoranthene	1200	110	1900	100	µg/kg	525	**45**	NA	NA	None, RPD ≤ 50%
Fluorene	56	110	100	100	µg/kg	525	NA	44	210	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	720	110	520	100	µg/kg	525	NA	200	210	None, absolute difference ≤ 2x Avg RL
1-Methylnaphthalene	180	210	170	210	µg/kg	1050	NA	10	420	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	220	210	210	210	µg/kg	1050	NA	10	420	None, absolute difference ≤ 2x Avg RL
Naphthalene	160	210	180	210	µg/kg	1050	NA	20	420	None, absolute difference ≤ 2x Avg RL
Phenanthrene	580	42	1200	42	µg/kg	210	**70**	NA	NA	**J/UJ-flag, RPD > 50%**
Pyrene	870	110	1300	100	µg/kg	525	**40**	NA	NA	None, RPD ≤ 50%

Analyte	CV0005X-CS (680-87318-34)	RL	CV0005X-CSD (680-87318-35)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene		510	140	520	µg/kg	2575	NA	140	1030	None, absolute difference ≤ 2x Avg RL
Acenaphthylene	83	200	120	210	µg/kg	1025	NA	37	410	None, absolute difference ≤ 2x Avg RL
Anthracene	130	43	510	44	µg/kg	217.5	NA	**380**	**87**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(a)anthracene	400	41	1400	42	µg/kg	207.5	**111**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(a)pyrene	310	53	810	54	µg/kg	267.5	**89**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(b)fluoranthene	580	62	1300	64	µg/kg	315	**77**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(g,h,i)perylene	270	100	560	100	µg/kg	500	NA	**290**	**200**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(k)fluoranthene	150	41	450	42	µg/kg	207.5	NA	**300**	**83**	**J/UJ-flag, absolute difference > 2x Avg RL**
Chrysene	470	46	960	47	µg/kg	232.5	**69**	NA	NA	**J/UJ-flag, RPD > 50%**
Dibenzo(a,h)anthracene	120	100	220	100	µg/kg	500	NA	100	200	None, absolute difference ≤ 2x Avg RL
Fluoranthene	660	100	2300	100	µg/kg	500	**111**	NA	NA	**J/UJ-flag, RPD > 50%**
Fluorene	33	100	190	100	µg/kg	500	NA	157	200	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	270	100	520	100	µg/kg	500	NA	**250**	**200**	**J/UJ-flag, absolute difference > 2x Avg RL**
1-Methylnaphthalene	180	200	250	210	µg/kg	1025	NA	70	410	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	210	200	310	210	µg/kg	1025	NA	100	410	None, absolute difference ≤ 2x Avg RL
Naphthalene	150	200	260	210	µg/kg	1025	NA	110	410	None, absolute difference ≤ 2x Avg RL
Phenanthrene	560	41	2200	42	µg/kg	207.5	**119**	NA	NA	**J/UJ-flag, RPD > 50%**
Pyrene	520	100	1500	100	µg/kg	500	**97**	NA	NA	**J/UJ-flag, RPD > 50%**

Analyte	CV0005Z-CS (680-87318-37)	RL	CV0005X-CSD (680-87318-38)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	57	170	100	210	µg/kg	950	NA	43	380	None, absolute difference ≤ 2x Avg RL
Anthracene	91	35	150	45	µg/kg	200	NA	59	80	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	270	34	460	43	µg/kg	192.5	**52**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(a)pyrene	220	44	320	55	µg/kg	247.5	NA	**100**	**99**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(b)fluoranthene	370	51	540	65	µg/kg	290	**37**	NA	NA	None, RPD ≤ 50%
Benzo(g,h,i)perylene	190	84	250	110	µg/kg	485	NA	60	194	None, absolute difference ≤ 2x Avg RL
Benzo(k)fluoranthene	110	34	240	43	µg/kg	192.5	NA	**130**	**77**	**J/UJ-flag, absolute difference > 2x Avg RL**
Chrysene	310	38	430	48	µg/kg	215	**32**	NA	NA	None, RPD ≤ 50%
Dibenzo(a,h)anthracene	77	84	100	110	µg/kg	485	NA	23	194	None, absolute difference ≤ 2x Avg RL
Fluoranthene	420	84	640	110	µg/kg	485	NA	**220**	**194**	**J/UJ-flag, absolute difference > 2x Avg RL**
Fluorene	26	84	35	110	µg/kg	485	NA	9	194	None, absolute difference ≤ 2x Avg RL
Indeno(1,2,3-cd)pyrene	180	84	260	110	µg/kg	485	NA	80	194	None, absolute difference ≤ 2x Avg RL
1-Methylnaphthalene	150	170	210	210	µg/kg	950	NA	60	380	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	180	170	250	210	µg/kg	950	NA	70	380	None, absolute difference ≤ 2x Avg RL
Naphthalene	130	170	180	210	µg/kg	950	NA	50	380	None, absolute difference ≤ 2x Avg RL
Phenanthrene	280	34	450	43	µg/kg	192.5	**47**	NA	NA	None, RPD ≤ 50%
Pyrene	270	84	430	110	µg/kg	485	NA	160	194	None, absolute difference ≤ 2x Avg RL

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram
J - Estimated value
NA - Not applicable
RL - Reporting limit
RPD - Relative percent difference
UJ - Not detected and the limit is estimated

Evaluation of Field Duplicate Results **Attachment B**

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C

CASE NARRATIVE

Job ID: 680-87318-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-87318-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/09/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.2º C and 2.8º C.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV0005O-CS (680-87318-21), CV0005O-CSD (680-87318-22), CV0005Q-CS (680-87318-23), CV0005P-CS (680-87318-24), CV0005R-CS (680-87318-25), CV0005R-CSD (680-87318-26), CV0005S-CS (680-87318-27), CV0005T-CS (680-87318-28), CV0005T-CSD (680-87318-29), CV0005U-CS (680-87318-30), CV0005U-CSD (680-87318-31), CV0005V-CS (680-87318-32), CV0005W-CS (680-87318-33), CV0005X-CS (680-87318-34), CV0005X-CSD (680-87318-35), CV0005Y-CS (680-87318-36), CV0005Z-CS (680-87318-37), CV0005Z-CSD (680-87318-38), CV0005AA-CS (680-87318-39) and CV0005BB-CS (680-87318-40) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/14/2013 and analyzed on 02/15/2013, 02/16/2013 and 02/18/2013.

Samples CV0005Q-CS (680-87318-23)[4X], CV0005R-CS (680-87318-25)[4X], CV0005R-CSD (680-87318-26)[4X], CV0005S-CS (680-87318-27)[4X], CV0005T-CS (680-87318-28)[4X], CV0005T-CSD (680-87318-29)[4X], CV0005U-CS (680-87318-30)[4X], CV0005U-CSD (680-87318-31)[4X], CV0005V-CS (680-87318-32)[4X], CV0005W-CS (680-87318-33)[4X], CV0005X-CS (680-87318-34)[4X], CV0005X-CSD (680-87318-35)[4X], CV0005Y-CS (680-87318-36)[4X], CV0005Z-CS (680-87318-37)[4X], CV0005Z-CSD (680-87318-38)[4X], CV0005AA-CS (680-87318-39)[4X] and CV0005BB-CS (680-87318-40)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Several analytes recovered outside the recovery criteria for the MSD of sample CV0005Y-CS (680-87318-36) in batch 660-134532. Several analytes also exceeded the rpd limit.

No other difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All other quality control parameters were within the acceptance limits.

ATTACHMENT D

QUALIFIED SAMPLE RESULTS

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-2
SDG: 68087318-2

Client Sample ID: CV0005O-CS
Lab Sample ID: 680-87318-21
Date Collected: 02/07/13 13:45
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 94.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Acenaphthylene	**17**	**J**	42	5.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Anthracene	**26**		8.7	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Benzo[a]anthracene	**180**	J	8.3	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Benzo[a]pyrene	**180**	J	11	5.4	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Benzo[b]fluoranthene	**310**	J	13	6.3	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Benzo[g,h,i]perylene	**130**	J	21	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Benzo[k]fluoranthene	**97**	J	8.3	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Chrysene	**190**	J	9.4	4.7	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Dibenz(a,h)anthracene	**39**		21	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Fluoranthene	**320**	J	21	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Fluorene	**8.0**	**J**	21	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Indeno[1,2,3-cd]pyrene	**100**	J	21	7.4	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
1-Methylnaphthalene	**39**	**J**	42	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
2-Methylnaphthalene	**50**		42	7.4	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Naphthalene	**44**		42	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Phenanthrene	**130**		8.3	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1
Pyrene	**300**	J	21	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*62*		*30 - 130*	*02/14/13 11:19*	*02/15/13 19:45*	*1*

Client Sample ID: CV0005O-CSD
Lab Sample ID: 680-87318-22
Date Collected: 02/07/13 13:47
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 91.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	22	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Acenaphthylene	**6.7**	**J**	44	5.5	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Anthracene	**26**		9.2	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Benzo[a]anthracene	**85**	J	8.8	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Benzo[a]pyrene	**75**	J	11	5.7	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Benzo[b]fluoranthene	**120**	J	13	6.7	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Benzo[g,h,i]perylene	**65**	J	22	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Benzo[k]fluoranthene	**38**	J	8.8	3.9	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Chrysene	**93**	J	9.8	4.9	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Dibenz(a,h)anthracene	**13**	**J**	22	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Fluoranthene	**180**	J	22	4.4	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Fluorene	**8.4**	**J**	22	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Indeno[1,2,3-cd]pyrene	**47**	J	22	7.8	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
1-Methylnaphthalene	**100**		44	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
2-Methylnaphthalene	**100**		44	7.8	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Naphthalene	**57**		44	4.8	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Phenanthrene	**120**		8.8	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1
Pyrene	**150**	J	22	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*67*		*30 - 130*	*02/14/13 11:19*	*02/15/13 20:03*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample ID: CV0005Q-CS
Date Collected: 02/07/13 13:57
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-23
Matrix: Solid
Percent Solids: 75.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	530	U	530	110	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Acenaphthylene	**37**	**J**	210	26	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Anthracene	**49**		44	22	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Benzo[a]anthracene	**320**		42	21	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Benzo[a]pyrene	**370**		55	27	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Benzo[b]fluoranthene	**570**		64	32	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Benzo[g,h,i]perylene	**310**		110	23	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Benzo[k]fluoranthene	**180**		42	19	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Chrysene	**360**		47	24	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Dibenz(a,h)anthracene	**85**	**J**	110	22	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Fluoranthene	**510**		110	21	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Fluorene	110	U	110	22	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Indeno[1,2,3-cd]pyrene	**260**		110	37	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
1-Methylnaphthalene	**78**	**J**	210	23	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
2-Methylnaphthalene	**89**	**J**	210	37	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Naphthalene	**87**	**J**	210	23	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Phenanthrene	**270**		42	21	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4
Pyrene	**500**		110	19	ug/Kg	☼	02/14/13 11:19	02/15/13 20:21	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*68*		*30 - 130*	*02/14/13 11:19*	*02/15/13 20:21*	*4*

Client Sample ID: CV0005P-CS
Date Collected: 02/07/13 13:52
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-24
Matrix: Solid
Percent Solids: 97.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Acenaphthylene	**19**	**J**	41	5.1	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Anthracene	**20**		8.6	4.3	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Benzo[a]anthracene	**110**		8.2	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Benzo[a]pyrene	**130**		11	5.3	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Benzo[b]fluoranthene	**200**		12	6.2	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Benzo[g,h,i]perylene	**90**		20	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Benzo[k]fluoranthene	**62**		8.2	3.7	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Chrysene	**130**		9.2	4.6	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Dibenz(a,h)anthracene	**22**		20	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Fluoranthene	**270**		20	4.1	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Fluorene	**8.3**	**J**	20	4.2	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Indeno[1,2,3-cd]pyrene	**80**		20	7.3	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
1-Methylnaphthalene	**28**	**J**	41	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
2-Methylnaphthalene	**37**	**J**	41	7.3	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Naphthalene	**38**	**J**	41	4.5	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Phenanthrene	**170**		8.2	4.0	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1
Pyrene	**260**		20	3.8	ug/Kg	☼	02/14/13 11:19	02/15/13 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*56*		*30 - 130*	*02/14/13 11:19*	*02/15/13 20:39*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-2
SDG: 68087318-2

Client Sample ID: CV0005R-CS
Date Collected: 02/07/13 14:11
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-25
Matrix: Solid
Percent Solids: 74.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	540	U	540	110	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Acenaphthylene	**62**	**J**	220	27	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Anthracene	**98**		45	23	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Benzo[a]anthracene	**370**		43	21	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Benzo[a]pyrene	**270**		56	28	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Benzo[b]fluoranthene	**390**		66	33	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Benzo[g,h,i]perylene	**310**		110	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Benzo[k]fluoranthene	**200**		43	19	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Chrysene	**400**		49	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Dibenz(a,h)anthracene	**100**	**J**	110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Fluoranthene	**520**		110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Fluorene	**28**	**J**	110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Indeno[1,2,3-cd]pyrene	**250**		110	38	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
1-Methylnaphthalene	**90**	**J**	220	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
2-Methylnaphthalene	**130**	**J**	220	38	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Naphthalene	**130**	**J**	220	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Phenanthrene	**320**		43	21	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4
Pyrene	**410**		110	20	ug/Kg	☼	02/14/13 14:34	02/15/13 22:25	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*30 - 130*	*02/14/13 14:34*	*02/15/13 22:25*	*4*

Client Sample ID: CV0005R-CSD
Date Collected: 02/07/13 14:13
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-26
Matrix: Solid
Percent Solids: 75.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	530	U	530	110	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Acenaphthylene	**84**	**J**	210	26	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Anthracene	**110**		44	22	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Benzo[a]anthracene	**390**		42	21	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Benzo[a]pyrene	**250**		55	27	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Benzo[b]fluoranthene	**430**		64	32	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Benzo[g,h,i]perylene	**250**		110	23	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Benzo[k]fluoranthene	**140**		42	19	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Chrysene	**340**		48	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Dibenz(a,h)anthracene	**77**	**J**	110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Fluoranthene	**590**		110	21	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Fluorene	**29**	**J**	110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Indeno[1,2,3-cd]pyrene	**230**		110	37	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
1-Methylnaphthalene	**150**	**J**	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
2-Methylnaphthalene	**200**	**J**	210	37	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Naphthalene	**130**	**J**	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Phenanthrene	**390**		42	21	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4
Pyrene	**430**		110	20	ug/Kg	☼	02/14/13 14:34	02/15/13 22:40	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*30 - 130*	*02/14/13 14:34*	*02/15/13 22:40*	*4*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-2
SDG: 68087318-2

Client Sample ID: CV0005S-CS
Date Collected: 02/07/13 14:10
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-27
Matrix: Solid
Percent Solids: 72.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	540	U	540	110	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Acenaphthylene	180	J	210	27	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Anthracene	280		45	23	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Benzo[a]anthracene	970		43	21	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Benzo[a]pyrene	630		56	28	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Benzo[b]fluoranthene	950		66	33	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Benzo[g,h,i]perylene	520		110	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Benzo[k]fluoranthene	340		43	19	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Chrysene	780		48	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Dibenz(a,h)anthracene	190		110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Fluoranthene	1400		110	21	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Fluorene	64	J	110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Indeno[1,2,3-cd]pyrene	460		110	38	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
1-Methylnaphthalene	170	J	210	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
2-Methylnaphthalene	230	J	210	38	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Naphthalene	160	J	210	24	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Phenanthrene	830		43	21	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4
Pyrene	1000		110	20	ug/Kg	☼	02/14/13 14:34	02/15/13 22:55	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*30 - 130*	*02/14/13 14:34*	*02/15/13 22:55*	*4*

Client Sample ID: CV0005T-CS
Date Collected: 02/07/13 14:23
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-28
Matrix: Solid
Percent Solids: 75.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	530	U	530	110	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Acenaphthylene	270		210	27	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Anthracene	320		45	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Benzo[a]anthracene	1000		43	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Benzo[a]pyrene	770		55	28	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Benzo[b]fluoranthene	1000		65	33	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Benzo[g,h,i]perylene	640		110	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Benzo[k]fluoranthene	450		43	19	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Chrysene	890		48	24	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Dibenz(a,h)anthracene	220		110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Fluoranthene	1300		110	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Fluorene	50	J	110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Indeno[1,2,3-cd]pyrene	550		110	38	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
1-Methylnaphthalene	140	J	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
2-Methylnaphthalene	160	J J	210	38	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Naphthalene	140	J	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Phenanthrene	730		43	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4
Pyrene	1100		110	20	ug/Kg	☼	02/14/13 14:34	02/15/13 23:10	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*86*		*30 - 130*	*02/14/13 14:34*	*02/15/13 23:10*	*4*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-2
SDG: 68087318-2

Client Sample ID: CV0005T-CSD
Date Collected: 02/07/13 14:25
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-29
Matrix: Solid
Percent Solids: 74.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	530	U	530	110	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Acenaphthylene	**250**		210	27	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Anthracene	**280**		45	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Benzo[a]anthracene	**1100**		42	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Benzo[a]pyrene	**660**		55	28	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Benzo[b]fluoranthene	**880**		65	32	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Benzo[g,h,i]perylene	**530**		110	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Benzo[k]fluoranthene	**470**		42	19	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Chrysene	**850**		48	24	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Dibenz(a,h)anthracene	**190**		110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Fluoranthene	**1400**		110	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Fluorene	**72**	J	110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Indeno[1,2,3-cd]pyrene	**520**		110	38	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
1-Methylnaphthalene	**170**	J	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
2-Methylnaphthalene	**220**	J	210	38	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Naphthalene	**160**	J	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Phenanthrene	**790**		42	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4
Pyrene	**1200**		110	20	ug/Kg	☼	02/14/13 14:34	02/15/13 23:25	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*30 - 130*	*02/14/13 14:34*	*02/15/13 23:25*	*4*

Client Sample ID: CV0005U-CS
Date Collected: 02/07/13 14:32
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-30
Matrix: Solid
Percent Solids: 74.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	530	U	530	110	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Acenaphthylene	**360**		210	27	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Anthracene	**440**		45	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Benzo[a]anthracene	**840**		42	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Benzo[a]pyrene	**780**		55	28	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Benzo[b]fluoranthene	**1000**		65	32	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Benzo[g,h,i]perylene	**680**		110	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Benzo[k]fluoranthene	**420**		42	19	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Chrysene	**750**		48	24	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Dibenz(a,h)anthracene	**220**		110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Fluoranthene	**1200**		110	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Fluorene	**56**	J	110	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Indeno[1,2,3-cd]pyrene	**720**		110	38	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
1-Methylnaphthalene	**180**	J	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
2-Methylnaphthalene	**220**	J	210	38	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Naphthalene	**160**	J	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Phenanthrene	**580**	J	42	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4
Pyrene	**870**		110	20	ug/Kg	☼	02/14/13 14:34	02/15/13 23:40	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*91*		*30 - 130*	*02/14/13 14:34*	*02/15/13 23:40*	*4*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample ID: CV0005U-CSD

Lab Sample ID: 680-87318-31

Date Collected: 02/07/13 14:34
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 76.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	520	U	520	100	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Acenaphthylene	**190**	**J**	210	26	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Anthracene	**360**		44	22	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Benzo[a]anthracene	**1100**		42	20	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Benzo[a]pyrene	**710**		55	27	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Benzo[b]fluoranthene	**1100**		64	32	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Benzo[g,h,i]perylene	**530**		100	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Benzo[k]fluoranthene	**380**		42	19	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Chrysene	**830**		47	24	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Dibenz(a,h)anthracene	**190**		100	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Fluoranthene	**1900**		100	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Fluorene	**100**		100	21	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Indeno[1,2,3-cd]pyrene	**520**		100	37	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
1-Methylnaphthalene	**170**	**J**	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
2-Methylnaphthalene	**210**	**J**	210	37	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Naphthalene	**180**	**J**	210	23	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Phenanthrene	**1200**	**J**	42	20	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4
Pyrene	**1300**		100	19	ug/Kg	☼	02/14/13 14:34	02/15/13 23:56	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*79*		*30 - 130*	*02/14/13 14:34*	*02/15/13 23:56*	*4*

Client Sample ID: CV0005V-CS

Lab Sample ID: 680-87318-32

Date Collected: 02/07/13 14:34
Matrix: Solid
Date Received: 02/09/13 10:33
Percent Solids: 70.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	550	U	550	110	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Acenaphthylene	**180**	**J**	220	27	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Anthracene	**96**		46	23	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Benzo[a]anthracene	**770**		44	21	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Benzo[a]pyrene	**870**		57	29	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Benzo[b]fluoranthene	**1400**		67	33	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Benzo[g,h,i]perylene	**670**		110	24	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Benzo[k]fluoranthene	**340**		44	20	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Chrysene	**740**		49	25	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Dibenz(a,h)anthracene	**160**		110	23	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Fluoranthene	**1200**		110	22	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Fluorene	**31**	**J**	110	23	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Indeno[1,2,3-cd]pyrene	**590**		110	39	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
1-Methylnaphthalene	**120**	**J**	220	24	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
2-Methylnaphthalene	**110**	**J**	220	39	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Naphthalene	**110**	**J**	220	24	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Phenanthrene	**460**		44	21	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4
Pyrene	**1200**		110	20	ug/Kg	☼	02/14/13 14:34	02/18/13 14:47	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*30 - 130*	*02/14/13 14:34*	*02/18/13 14:47*	*4*

Client Sample ID: CV0005W-CS — **Lab Sample ID: 680-87318-33**
Date Collected: 02/07/13 14:41 — **Matrix: Solid**
Date Received: 02/09/13 10:33 — **Percent Solids: 83.0**

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	470	U	470	94	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Acenaphthylene	**120**	**J**	190	24	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Anthracene	**130**		40	20	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Benzo[a]anthracene	**670**		38	18	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Benzo[a]pyrene	**620**		49	24	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Benzo[b]fluoranthene	**950**		57	29	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Benzo[g,h,i]perylene	**480**		94	21	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Benzo[k]fluoranthene	**350**		38	17	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Chrysene	**640**		42	21	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Dibenz(a,h)anthracene	**110**		94	19	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Fluoranthene	**1200**		94	19	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Fluorene	**53**	**J**	94	19	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Indeno[1,2,3-cd]pyrene	**360**		94	33	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
1-Methylnaphthalene	**150**	**J**	190	21	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
2-Methylnaphthalene	**160**	**J**	190	33	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Naphthalene	**110**	**J**	190	21	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Phenanthrene	**560**		38	18	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4
Pyrene	**1100**		94	17	ug/Kg	☼	02/14/13 14:34	02/18/13 15:05	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*55*		*30 - 130*	*02/14/13 14:34*	*02/18/13 15:05*	*4*

Client Sample ID: CV0005X-CS — **Lab Sample ID: 680-87318-34**
Date Collected: 02/07/13 15:00 — **Matrix: Solid**
Date Received: 02/09/13 10:33 — **Percent Solids: 77.4**

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	510	U	510	100	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Acenaphthylene	**83**	**J**	200	25	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Anthracene	**130**	**J**	43	21	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Benzo[a]anthracene	**400**	**J**	41	20	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Benzo[a]pyrene	**310**	**J**	53	26	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Benzo[b]fluoranthene	**580**	**J**	62	31	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Benzo[g,h,i]perylene	**270**	**J**	100	22	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Benzo[k]fluoranthene	**150**	**J**	41	18	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Chrysene	**470**	**J**	46	23	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Dibenz(a,h)anthracene	**120**		100	21	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Fluoranthene	**660**	**J**	100	20	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Fluorene	**33**	**J**	100	21	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Indeno[1,2,3-cd]pyrene	**270**	**J**	100	36	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
1-Methylnaphthalene	**180**	**J**	200	22	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
2-Methylnaphthalene	**210**	**J**	200	36	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Naphthalene	**150**	**J**	200	22	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Phenanthrene	**560**	**J**	41	20	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4
Pyrene	**520**	**J**	100	19	ug/Kg	☼	02/14/13 14:34	02/16/13 00:41	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*30 - 130*	*02/14/13 14:34*	*02/16/13 00:41*	*4*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-2
SDG: 68087318-2

Client Sample ID: CV0005X-CSD

Lab Sample ID: 680-87318-35

Date Collected: 02/07/13 15:02
Date Received: 02/09/13 10:33

Matrix: Solid
Percent Solids: 76.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**140**	J	520	100	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Acenaphthylene	**120**	J	210	26	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Anthracene	**510**	J	44	22	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Benzo[a]anthracene	**1400**	J	42	20	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Benzo[a]pyrene	**810**	J	54	27	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Benzo[b]fluoranthene	**1300**	J	64	32	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Benzo[g,h,i]perylene	**560**	J	100	23	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Benzo[k]fluoranthene	**450**	J	42	19	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Chrysene	**960**	J	47	24	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Dibenz(a,h)anthracene	**220**		100	21	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Fluoranthene	**2300**	J	100	21	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Fluorene	**190**		100	21	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Indeno[1,2,3-cd]pyrene	**520**	J	100	37	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
1-Methylnaphthalene	**250**		210	23	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
2-Methylnaphthalene	**310**	J	210	37	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Naphthalene	**260**		210	23	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Phenanthrene	**2200**	J	42	20	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4
Pyrene	**1500**	J	100	19	ug/Kg	☼	02/14/13 14:34	02/16/13 00:56	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*30 - 130*	*02/14/13 14:34*	*02/16/13 00:56*	*4*

Client Sample ID: CV0005Y-CS

Lab Sample ID: 680-87318-36

Date Collected: 02/07/13 15:00
Date Received: 02/09/13 10:33

Matrix: Solid
Percent Solids: 70.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	560	U	560	110	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Acenaphthylene	**68**	J	220	28	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Anthracene	**140**		47	24	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Benzo[a]anthracene	**510**	F J	45	22	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Benzo[a]pyrene	**350**	F J	58	29	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Benzo[b]fluoranthene	**610**	F J	68	34	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Benzo[g,h,i]perylene	**310**	F J	110	25	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Benzo[k]fluoranthene	**210**	F J	45	20	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Chrysene	**450**	F J	50	25	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Dibenz(a,h)anthracene	**140**		110	23	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Fluoranthene	**630**	F J	110	22	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Fluorene	110	U	110	23	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Indeno[1,2,3-cd]pyrene	**320**	F J	110	40	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
1-Methylnaphthalene	**190**	J	220	25	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
2-Methylnaphthalene	**230**	J	220	40	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Naphthalene	**170**	J	220	25	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Phenanthrene	**440**	F J	45	22	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4
Pyrene	**460**	F J	110	21	ug/Kg	☼	02/14/13 14:34	02/16/13 01:11	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*83*		*30 - 130*	*02/14/13 14:34*	*02/16/13 01:11*	*4*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-2
SDG: 68087318-2

Client Sample ID: CV0005Z-CS
Date Collected: 02/07/13 15:10
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-37
Matrix: Solid
Percent Solids: 95.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	420	U	420	84	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Acenaphthylene	**57**	**J**	170	21	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Anthracene	**91**		35	18	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Benzo[a]anthracene	**270**	J	34	16	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Benzo[a]pyrene	**220**	J	44	22	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Benzo[b]fluoranthene	**370**		51	26	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Benzo[g,h,i]perylene	**190**		84	18	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Benzo[k]fluoranthene	**110**	J	34	15	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Chrysene	**310**		38	19	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Dibenz(a,h)anthracene	**77**	**J**	84	17	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Fluoranthene	**420**	J	84	17	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Fluorene	**26**	**J**	84	17	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Indeno[1,2,3-cd]pyrene	**180**		84	30	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
1-Methylnaphthalene	**150**	**J**	170	18	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
2-Methylnaphthalene	**180**	J	170	30	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Naphthalene	**130**	**J**	170	18	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Phenanthrene	**280**		34	16	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4
Pyrene	**270**		84	16	ug/Kg	☼	02/14/13 14:34	02/16/13 01:57	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*30 - 130*	*02/14/13 14:34*	*02/16/13 01:57*	*4*

Client Sample ID: CV0005Z-CSD
Date Collected: 02/07/13 15:12
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-38
Matrix: Solid
Percent Solids: 74.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	530	U	530	110	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Acenaphthylene	**100**	**J**	210	27	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Anthracene	**150**		45	22	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Benzo[a]anthracene	**460**	J	43	21	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Benzo[a]pyrene	**320**	J	55	28	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Benzo[b]fluoranthene	**540**		65	33	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Benzo[g,h,i]perylene	**250**		110	23	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Benzo[k]fluoranthene	**240**	J	43	19	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Chrysene	**430**		48	24	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Dibenz(a,h)anthracene	**100**	**J**	110	22	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Fluoranthene	**640**	J	110	21	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Fluorene	**35**	**J**	110	22	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Indeno[1,2,3-cd]pyrene	**260**		110	38	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
1-Methylnaphthalene	**210**		210	23	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
2-Methylnaphthalene	**250**	J	210	38	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Naphthalene	**180**	**J**	210	23	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Phenanthrene	**450**		43	21	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4
Pyrene	**430**		110	20	ug/Kg	☼	02/14/13 14:34	02/16/13 02:12	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*30 - 130*	*02/14/13 14:34*	*02/16/13 02:12*	*4*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87318-2
SDG: 68087318-2

Client Sample ID: CV0005AA-CS
Date Collected: 02/07/13 15:35
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-39
Matrix: Solid
Percent Solids: 93.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	430	U	430	85	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Acenaphthylene	**100**	**J**	170	21	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Anthracene	**140**		36	18	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Benzo[a]anthracene	**370**		34	17	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Benzo[a]pyrene	**260**		44	22	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Benzo[b]fluoranthene	**420**		52	26	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Benzo[g,h,i]perylene	**220**		85	19	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Benzo[k]fluoranthene	**220**		34	15	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Chrysene	**320**		38	19	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Dibenz(a,h)anthracene	**79**	**J**	85	18	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Fluoranthene	**600**		85	17	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Fluorene	**24**	**J**	85	18	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Indeno[1,2,3-cd]pyrene	**170**		85	30	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
1-Methylnaphthalene	**120**	**J**	170	19	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
2-Methylnaphthalene	**140**	**J**	170	30	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Naphthalene	**130**	**J**	170	19	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Phenanthrene	**300**		34	17	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4
Pyrene	**370**		85	16	ug/Kg	☼	02/14/13 14:34	02/16/13 02:27	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*64*		*30 - 130*	*02/14/13 14:34*	*02/16/13 02:27*	*4*

Client Sample ID: CV0005BB-CS
Date Collected: 02/07/13 15:36
Date Received: 02/09/13 10:33

Lab Sample ID: 680-87318-40
Matrix: Solid
Percent Solids: 97.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	400	U	400	81	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Acenaphthylene	**210**		160	20	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Anthracene	**250**		34	17	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Benzo[a]anthracene	**740**	J	32	16	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Benzo[a]pyrene	**520**	J	42	21	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Benzo[b]fluoranthene	**810**	J	49	25	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Benzo[g,h,i]perylene	**380**	J	81	18	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Benzo[k]fluoranthene	**360**	J	32	15	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Chrysene	**600**	J	36	18	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Dibenz(a,h)anthracene	**150**		81	17	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Fluoranthene	**1100**	J	81	16	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Fluorene	**52**	J	81	17	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Indeno[1,2,3-cd]pyrene	**340**	J	81	29	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
1-Methylnaphthalene	**130**	J	160	18	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
2-Methylnaphthalene	**150**	J	160	29	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Naphthalene	**130**	J	160	18	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Phenanthrene	**590**	J	32	16	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4
Pyrene	**750**	J	81	15	ug/Kg	☼	02/14/13 14:34	02/16/13 02:42	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*81*		*30 - 130*	*02/14/13 14:34*	*02/16/13 02:42*	*4*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)